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ABSTRACT

The Chapter 1 Early Childhood Education (Preschool) Program in The Portland Public Schools (Oregon) provides educationally disadvantaged children with the experiences needed to ameliorate the disadvantages as they enter kindergarten. This year-end evaluation report contains both the statistical report forms with student test results and a narrative supplementary report for the 1984-85 preschool program. The narrative report contains: (1) a program description, including organization, student characteristics, recruitment and attendance, facilities and materials, daily activities, and project costs; (2) evaluation methodology and findings, which are organized according to program goals in the subject areas of language, arithmetic, small motor skills, and social skills as measured by the Record of Goals Mastery; (3) the follow-up study of former program students in kindergarten and grade 3; (4) comments on classroom observations conducted to examine both curriculum and instruction; and (5) summary and conclusions. Preschool evaluation results are more favorable than earlier years, with students making noticeable gains in academic areas. Follow-up study results are encouraging, but mixed. The Records of Goal Mastery Form and the Student Rating Form (used in the follow-up study) are appended. (BS)

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ED266163

1984-85 EVALUATION REPORT

ECIA, CHAPTER I EARLY CHILDHOOD EDUCATION PROGRAM

IN THE PORTLAND PUBLIC SCHOOLS

Research and Evaluation Dept.
Portland Public Schools
Portland, Oregon
Walter E. Hathaway, Director

Kan Yagi

July, 1985

U.S. DEPARTMENT OF EDUCATION
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EDUCATION CONSOLIDATION AND IMPROVEMENT ACT

CHAPTER 1 END-OF-YEAR REPORT

FISCAL YEAR 1985

PROJECT IDENTIFICATION

Name and Position of Person Completing the Report Kan Yagi

Evaluation Specialist Phone No. 249-2000, X335

School District Name, No., and Address Portland School District #1

501 N. Dixon St., Portland, OR 97227 County Multnomah

Project Title Chapter I Early Childhood Education

State Program Number 852568A Was it a Cooperative Project? Yes ___ No X

To be completed by all Districts

RETURN 2 COPIES TO:

Fred Buehling, Director
Compensatory Education
Oregon Department of Education
700 Pringle Parkway S.E.
Salem, Oregon 97310

581-2332 (4/83)

END OF YEAR REPORT
Chapter 1, ECIA, Report for 1983-84 School Year

DISTRICT IDENTIFICATION

District Name: Portland School District #1

District Address: 501 N. Dixon St., Portland, OR 97227

County Multnomah

CONTACT PERSON COMPLETING REPORT: Kan Yagi
PHONE NUMBER OF CONTACT: 249-2000, X335

DUE DATE: May 15, 1985. Return one (1) copy to:

Cliff Eberhardt, Specialist
Chapter 1 Program
Oregon Department of Education
700 Pringle Parkway S.E.
Salem, Oregon 97310

CHAPTER 1, ECIA, PARTICIPATION INFORMATION

1. Term of Project: [X] School Year Project or [ ] Summer School Project
Summer School Projects need NOT COMPLETE items 2, 3, and 7.

2. Number of Public School attendance areas whose students were eligible for Chapter 1 services during regular school term. [ ]

3. Number of Public School attendance areas whose students received Chapter 1 services during the regular school term. [ ]

4. Number (unduplicated count) of Chapter 1 students.

Grade	Public	Non Public
Pre K------	134	
K----------		
1----------		
2----------		
3----------		
4----------		
5----------		
6----------		
7----------		
8----------		
9----------		
10---------		
11---------		
12---------		
Total		

581-2332 (Rev. 3/84)

5. Total number (unduplicated count) of district and Chapter 1 students by racial/ethnic group and by type of school.

RACIAL/ETHNIC GROUP	Total DISTRICT Enrollment		Enrollment in CHAPTER 1	
	Public	Non Public	Public	Non Public
AMERICAN INDIAN OR ALASKAN NATIVE--			5	
ASIAN OR PACIFIC ISLANDER----------			10	
BLACK, NOT OF HISPANIC ORIGIN------			37	
WHITE, NOT OF HISPANIC ORIGIN------			110	
HISPANIC----------			3	
RUSSIAN----------				
TOTAL UNDUPLICATED COUNT			165	

6. Number (duplicated count) of Chapter 1 students by instructional service area and by type of school.

INSTRUCTIONAL SERVICE AREA	Public	Non Public
READING----------	165	
LANGUAGE ARTS (other than reading)-	165	
MATHEMATICS----------	165	
OTHER (Small Motor Skills)---	165	
OTHER (Social Skills)---	165	

7. Number of staff employed in your Chapter 1 program with Chapter 1 funds reported in full time equivalents by job classification. (regular term only)

JOB CLASSIFICATION	FULL TIME EQUIVALENT
SUPERVISORY STAFF----------	.25
TEACHERS----------	4.4
TEACHER AIDES----------	3.0
CURRICULUM SPECIALISTS----------	
SUPPORT SERVICES STAFF----------	0.6
CLERICAL STAFF----------	1.0
OTHERS (_____)---	

NOTE: 1.0 is full time and report to the nearest tenth.

8. Indicate the estimated expenditures and sources of funds used to support your Chapter 1 Program.

CHAPTER 1 FUNDS	$ 226,977
DISTRICT FUNDS	$
OTHER FUNDS (Specify)	$ 81,566
TOTAL FUNDS	$ 308,543

581-2332 (Rev. 3/84)
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EDUCATION CONSOLIDATION AND IMPROVEMENT ACT

CHAPTER 1 EARLY CHILDHOOD EVALUATION FORM

School Name Chapter I Preschool at Kenton & Ball Schools District Name Portland School Distirct #1

Grade: (Check One)
_____ Pre-Kdg.
_____ Kdg.
_____ 1st Grade

Subject Matter: (Check one)
(X) Reading
(X) Language Arts
(X) Math
(X) Other (specify) Small Motor & Social Skills

Pre Test: Record of Goals Mastery (Name of Test) 1977 (Edition) (Portland Developed) (Form) (Level)

Post Test: (Same) (Name of Test) _____ (Edition) _____ (Form) _____ (Level)

Portion of Test administered:
_____ Subtest only
(X) Total test (See note below)*

Type of score reported:
(X) Raw
_____ Stand

Title of Subtest: _____

Student Information Student Code #	Pretest Score	Posttest Score
1. DB	4	40
2. AB	0	32
3. JB	12	32
4. JD	5	39
5. MC	6	39
6. NC	8	38
7. SE	3	41
8. BG	8	41
9. RH	8	41
10. AM	3	41
11. SM	3	35
12. LR	4	41
13. AS	3	--
14. MS	2	41
15. TS	1	35
16. IW	0	39
17. HW	0	41
18. LB	9	41
19. AC	2	25
20. RC	4	39
21. JE	1	40
22. JF	0	41
23. AG	0	40
24. VG	0	41
25. AI	0	40

* Total test was used but scores are recorded and reported for only four subjects: Language, Math, Small Motor, and Social Skills.

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dew/0405G

Student Information Student Code #		Pretest Score	Posttest Score
26	DJ	4	40
27	MJ	7	41
28	ML	0	27
29	TP-M	2	35
30	KN	0	21
31	SP	2	24
32	SS	3	38
33	AS	2	41
34	JT	7	34
35	TT	3	38
36	LS	0	40
37	RV	6	40
38	MW	2	36
39	JW	--	41
1- 1	EF	25	38
1- 2	JA	21	33
1- 3	RG	27	40
1- 4	AF	26	--
1- 5	BD	33	33
1- 6	PB	23	--
1- 7	NB	32	41
1- 8	TB	31	--
1- 9	RA	32	41
1-10	MN	27	40
1-11	JM	30	40
1-12	CM	28	41
1-13	BM	29	41
1-14	JM	35	41
1-15	CL	22	36
1-16	AH	30	38
1-17	BH	30	40
1-18	SC	18	--
1-19	DB	30	--
1-20	TT	25	40
1-21	MR	35	41
1-22	AR	24	40
1-23	SP	10	10
1-24	NW	35	40
1-25	NT	22	--
1-26	CS	30	38
1-27	ST	35	29
1-28	MS	24	37
1-29	LP	7	33
1-30	CP	21	--
1-31	JP	13	33
1-32	RM	26	35
1-33	RMc	18	37
1-34	EM	12	28
1-35	KL	23	--
1-36	CJ	13	29

Student Information Student Code #	Pretest Score	Posttest Score
1-37 KJ	32	41
1-38 LG	22	35
1-39 JE	14	34
2- 1 RA	34	41
2- 2 SA	10	--
2- 3 MP	15	37
2- 4 Wdg	22	39
2- 5 JE	28	41
2- 6 TG	38	41
2- 7 KH	30	39
2- 8 KHo	30	40
2- 9 JH	18	37
2-10 JJ	13	37
2-11 MK	39	41
2-12 CL	19	41
2-13 PL	11	39
2-14 TL	33	39
2-15 SM	38	--
2-16 SR	6	--
2-17 MT	39	41
2-18 AT	20	40
2-19 SW	23	41
2-20 SB	16	--
2-21 JB	13	31
2-22 AC	34	41
2-23 KD	12	37
2-24 SH	16	34
2-25 EH	20	40
2-26 TJ	26	32
2-27 JK	12	36
2-28 AK	13	27
2-29 CM	14	38
2-30 CP	15	36
2-31 MP	30	39
2-32 AP	13	--
2-33 ES	38	41
2-34 KW	33	--
2-35 JV	37	--
2-36 KW	24	41
2-37 MD	--	40
2-38 HS	--	18
2-39 DP	--	40
2-40 HS	--	37
2-41 RM	--	--
2-42 PS	--	28
3-43 CS	--	41
3- 1 MB	8	--
3- 2 LB	21	28
3- 3 JB	28	--
3- 4 KK	30	37

Student Information Student Code #	Pretest Score	Posttest Score
3- 5 DT	11	17
3- 6 BC	29	35
3- 7 AD	18	28
3- 8 LR	12	31
3- 9 NP	14	27
3-10 TG	25	36
3-11 DB	18	--
3-12 KC	24	34
3-13 SN	34	40
3-14 AM	12	25
3-15 AH	13	30
3-16 LH	25	34
3-17 SW	29	37
3-18 DP	27	36
3-19 MA	24	32
3-20 KT	23	--
3-21 RB	15	32
3-22 MG	34	40
3-23 CC	24	--
3-24 PB	16	31
3-25 MJ	24	35
3-26 NF	15	28
3-27 JW	12	13
3-28 KS	8	24
3-29 CW	23	39
3-30 CWie	21	39
3-31 NA	24	31
3-32 TD	21	--
3-33 CL	12	24
3-34 RH	24	39
3-35 AO	13	31
3-36 EW	15	23
3-37 JM	14	35
3-38 TO	14	33
3-39 SB	21	32
3-40 KS	16	35
3-41 WJ	2	18
3-42 AH	8	33
3-43 RR	--	18
3-44 ER	--	17

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Chapter I Early Childhood Education Program

Year-End Evaluation Report

July 1985

Kan Yagi
Evaluation Specialist

Evaluation Department
Portland Public Schools
Portland, Oregon

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INTRODUCTION

This year-end evaluation report concludes the thirteenth year of operation of the Chapter I Early Childhood Education (Preschool)* Program in Portland Public Schools. The report is prepared as a narrative supplement to the statistical report forms used by Chapter I ECIA evaluation and is organized into six major sections: introduction, description of the program and evaluation methodology and findings, follow-up study of former program students in kindergarten and grade 3, observations and comments, summary and conclusions. The purpose of the Preschool program is to provide educationally disadvantaged children the experiences needed to ameliorate the disadvantages especially as they enter kindergarten.

DESCRIPTION OF THE PROGRAM

Information for the program description was obtained by observations of classrooms, reviews of program documents and materials, and interviews with the staff. The description includes the following: (a) organization of the program, (b) characteristics of the student population, (c) recruitment and attendance, (d) facilities and learning materials, (e) daily educational activities and (f) project costs.

Organization of the Program

This year, three Chapter I Preschool classrooms were again located at Kenton School and one at Ball School was added. All classrooms held two sessions of 2-1/2 hours daily - a total of eight classes. The capacity of the program was 160 children in classes of 20 each.

*The term, preschool, will be used here to identify the program and students in prekindergarten. The term, early childhood education, has sometimes been used in other studies to include kindergarten and other primary grades.

Each classroom was staffed with a certified teacher and an aide. Three teachers had previous experience in the program and for the fourth this was her first year. The principals at the two schools provided overall supervision of the classrooms and otherwise treated them like any others in the building. Specific administrative functions peculiar to the program were handled through the Headstart/Chapter I Program Coordinator's office.

Characteristics of the Student Population

Table 1 shows the ethnic background of students enrolled during the 1984-85 school year. The majority was white (67 percent), with 33 percent being minority, which is slightly higher than the 26 percent minority enrollment for the entire district. Most students reside in the North Portland area which is predominantly white.

TABLE 1

Ethnic Composition of Student Population[1]

Ethnic Group	N	Percent
White	110	67
Black	37	22
Spanish Surname	3	02
Oriental	10	06
American Indian	5	03
Total	165	100

1 Tabulations were made at the time the District's enrollment report (A1 report) to the State was prepared; therefore, it does not include students enrolled after that date.

Recruitment and Attendance

Eligibility for participation in the program is based on age, residency within the boundaries of Chapter I school service areas, family income, number of parents and siblings, and an appraisal of the student as educationally disadvantaged.

Enrollment of students in the Chapter I preschool program is voluntary. Parents who seek to enroll students are interviewed to determine the reasons for enrolling their children, family's educational history, children's medical history and factors which might influence the children's educational achievements positively, as well as negatively. Accommodations are usually made during the year for children who were attending preschool programs in other cities or states and seek to become enrolled in the Portland schools.

Knowledge of the program is usually gained through word of mouth with some students referred by schools and human service agencies. The program has become so well-known that by the end of a school year, enrollment for the next year is virtually complete. A waiting list of eligible students is maintained so vacancies are filled without significant delay.

Student attendance each month is shown in Table 2 for all classrooms combined. The percent student attendance is determined by dividing the total days present by the total days membership. The resulting figure represents the percent of students in attendance on a typical school day. The monthly averages tend to be about 84 percent, which is about 3 percent lower than last year and slightly lower than the averages of the previous years. The average

for kindergarten children again this year was about 91 percent or equal to previous years, with averages for all K-12 students about 93 percent.

TABLE 2

Percent Student Attendance

Month	Percent
September	92
October	88
November	87
December	82
January	80
February	77
March	83
April	85
May	85
June	86

Tabulations of individual attendance indicated some students were absent more frequently than others. One of three (35 percent) of the 133 students who was enrolled for 140 days or more was absent 30 days or more; 25 of them were absent 40 days or more. These are higher percentages of students with large numbers of absences than in previous years. A large number of absences for a single year with extenuating circumstances such as serious illnesses may not be particularly undesirable, especially at the preschool level; however, if students are allowed high frequencies of absences through subsequent grades, the pattern could result in serious handicaps for the children. Besides being

handicapped academically, children could develop the attitude that it is acceptable to miss school occasionally. It is widely acknowledged that students who miss school often have difficulty keeping up in their classroom.

The question of student turnover, especially among disadvantaged children, arises frequently. Attendance records indicated 110 students (59 percent) were enrolled for 156 days or more, or more than 90 percent of the full school year. This is only a slightly lower percentage than the record last year showed, but it is noticeably lower than the percentages for 1981-82 and 1982-83 which were about 75 percent.

Facilities and Learning Materials

Each classroom was arranged with a large area of tables and chairs for seatwork and snacks. Another large, carpeted area was used for whole group activities. Smaller areas were arranged to accommodate individual or small group activities such as a library, housekeeping facilities, sandtable, playstore, and a variety of games and puzzles. Each room had a record player and other audio-visual equipment was shared within the school.

Arrangements were made for students to go to the library once a week. There they would listen to a story read by the librarian, brouse, and select books to be taken back to their rooms for the week. Regular use of books was common in every classroom. Children were often encouraged to look at books as an alternative for free play or fill in activity.

On good days, children were taken outdoors where they participated in large motor skills development, e.g., climbing, skipping, hopping, galloping, and various games where the ability to follow directions and social skills were involved. Available playground equipment, painted lines, and other objects were used in these experiences.

Teachers and aides showed considerable ingenuity in designing activities and the quantities of consumable seat work material being used daily. To add to the variety, students often grew plants and participated in other kinds of science-like projects. In general, the materials and equipment appeared sufficient and appropriate to facilitate meeting the instructional goals as shown on the Record of Goals Mastery (attached).

Daily Educational Activities

As in past years, there is a great similarity among classrooms in the kinds of activities one would observe. There is a mixture of large and small group activities alternated during a session. Each session usually begins with a large group activity involving roll call; the identification of the day, date and month; and a determination of the kind of weather. Small group activities, e.g., coloring, counting, cutting, pasting, identified with the achievement goals usually follow. Although there are variations in schedules across classrooms, they generally include a story time, large and/or small motor development activity and snack time, all of which are conducted in large group settings. Guided free activities and most of the specific academic skill development activities are usually individual or small group arrangements. The design for each activity is largely the discretion of the teacher.

Project Costs

The budget for the 1984-85 school year was $226,977 which was larger than the previous year to accommodate to the extra classroom. The major cost item, of course, was salaries and benefits of personnel totaling 83 percent of the budget. An estimate of the cost-per-pupil derived by dividing the total budget of $226,977 by the average daily membership was slightly over $1,500.

EVALUATION METHODOLOGY AND FINDINGS

Most classroom instruction is targeted for those achievements or skills that can be learned and which are less dependent on maturation for attainment. Language skills and numerical concepts, along with some small motor and social skills, are primarily learned. On the other hand, large motor and perceptual skills are heavily influenced by maturation - performances which are highly associated with physical maturity. Evaluation for Chapter I purposes reflects this priority of instruction.

The evaluation information is organized according to the program goals in the four subject areas of language, arithmetic, small motor skills and social skills. The Record of Goals Mastery was used in the fall (October) and again in the spring (May) to record the achievements of goals in these areas. The data were tabulated to show the percentage of students who demonstrated mastery of the skill at each time of the year. Differences in the percentages of students demonstrating mastery at the beginning and end of the year indicate the achievements of the students during the year. The scores and

differences shown in Tables 5, 6, 7 and 8 are based on students with matched Fall and Spring scores; therefore, the number is smaller than the number enrolled during the year or enrolled at any one time.

Language Skills

As shown in Table 5, the percent of students demonstrating mastery of each language skill by the end of the school year ranged from 57 percent to 98 percent. The percent of students who appeared to have achieved the skill during the year ranged from 11 to 70 percent, depending on the particular skill; about one-third to two-thirds achieved the skills during the year. Longitudinal data now spanning nine years showed achievements in language generally appear to be about the same as they were the last few years and noticeably better than the average of the first five years. Some caution should be exercised in interpreting this finding because teachers differ in their rating and, due to turnover, the composition of the teaching staff changes each year.

The most frequently achieved skills are identifying common objects, e.g., parts of the body, naming animals and describing objects according to colors and locations. These skills are also ones which are more commonly reinforced at home or outside of school. Mastery of language skills more characteristically associated with school, e.g., giving answers to questions about a story and reciting rhyming combinations, was demonstrated less frequently. In fact, the mastery of these skills, which tend to be more academic in nature, appears to be about the same as mastery of numerical concepts which are likewise quite academic in nature.

Numerical Concepts

Table 6 shows the percent of student achievements in numerical concepts. The percent showing mastery at the end of the school year ranged from 71 to 93 - a range that is slightly smaller than that for language and about the same as last year. The percent who appeared to have achieved the skill during the year ranged from 41 to 71, depending on the particular skill. Numerical concepts are largely those achieved at school and not practiced as much at home or outside of school so it is not surprising that more of these skills were learned than language during the year.

The pattern of achievement of numerical skills over the last nine years is much like that for language, i.e., in general the percentages of students demonstrating mastery at the end of the year were about the same as the past few years, but the percentages are higher than the first five years. Again, the same caution due to teacher differences holds in the interpretation of these findings.

Nearly all of the numerical concepts appear to be those which are addressed most commonly in schools and are less likely to be reinforced in homes or outside of school. Perhaps for this reason, the percent of children demonstrating mastery of these concepts is slightly lower than for language at both the fall and spring observations. Mastery of quantity and size comparisons is demonstrated more frequently than skills which are more academic in nature, e.g., associating symbol with number.

Small Motor Skills

Achievements of small motor skills are shown in Table 7. The children mastered most of these skills quite easily, with large percentages acquiring the more difficult skills of using scissors, using opposing thumb and pounding nails during the year. About 90 percent or more of the children demonstrated mastery of each of the small motor skills by the end of the school year. Pounding nails, a difficult task even for adults, was mastered by nearly all children who were exposed to this task (one classroom did not participate in this activity). Small motor skills involve eye-hand coordination in manipulating objects. Manipulating an object with moving parts, e.g., scissors, continues to be among the most difficult skill to master.

Social Skills

Table 8 shows the achievements of social skills. The percents of students demonstrating mastery in the fall are high, and for this reason the percents achieving the skills during the year are generally lower than those achieving skills in other areas. Social skills are usually not taught as a separate entity; rather, other learning activities are arranged or conducted in a manner to cultivate these skills. Many skills are also those taught and practiced at home or outside of school, so some learning takes place there. Because social skills are such an integral part of all activities, it may be appropriate to assess these skills in the context of specific kinds of learning tasks where certain standards of behavior are expected, e.g., remaining quiet during seatwork, staying in line when leaving the classroom.

In general, social skills involving interactions with others are achieved more readily than skills involving the child alone. For example, more children demonstrate mastery of sharing toys with others than they do of overcoming fear of new situations. Patterns of achievement of social skills over the last nine years are comparable, i.e., the percents showing mastery of the skills at the end of the school year are comparable to those of previous years.

Overall, the achievements of the students in the four skill areas of language skills, numerical concepts, small motor skills and social skills tended to be quite satisfactory, with about 90 percent of the students mastering 75 percent or more of the skills in each area. Achievements appeared to be about equal to those of the last few years and better than in years previous.

Table 9 shows the percentages of students demonstrating mastery (expressed as percentages) of the objectives for each subject for the last nine years. The results for Spring 1985 show that in each area, over 40 percent of the students demonstrated mastery of all goals in a subject. The percentages of students mastering 100 percent of the goals in each area were about the same as those for the previous three years and higher than those of the first five years. It is possible that the increased attention of teachers and aides to time on task has resulted in increased performances.

TABLE 5

Language Skills

N = 135

LANGUAGE SKILL	Percent Mastering Skill: Pre-Test	Post-Test	% Gain
Describes objects according to their characteristics			
Colors:			
(red, yellow, blue)	51	90	39
(green, orange, purple)	41	87	46
(brown, black, white)	44	90	46
Location:			
(stove, bed, toilet, refrigerator, bathtub, sofa)	52	96	44
Answers simple questions by giving answers in complete sentences	34	89	55
Identifies common objects:			
(head, leg, arm)	87	98	11
(eyes, nose, mouth, ears, foot, knee, hand, fingers)	73	97	24
(rabbit, dog, cat, bird)	76	98	22
(horse, chicken, cow, goat, sheep)	26	88	62
(lion, tiger, monkey, elephant, seal, camel, bear, giraffe)	12	68	56
Listens with increasing attention span: (longer or more complex stories can satisfactorily be presented by the teacher as the year progresses)	23	93	70
Expresses self freely and clearly: (notifies teacher when it is appropriate, e.g., when s/he needs help or permission)	47	93	46
Gives clearly spoken, spontaneous answers to questions about a story	37	85	48
Orally identifies four simple rhyming combinations	10	57	47
Understands and uses simple prepositional relationships: (places objects in front of, behind, beside, under, around, inside, outside, on)	45	89	44

TABLE 6

Numerical Concepts

N = 78

NUMERICAL CONCEPTS	Percent Mastering Skill: Pre-Test	Post-Test	% Gain
Recognizes and identifies simple shapes:			
(points to and names: circle, square, triangle)	32	83	51
(points to and names: rectangle, diamond)	11	73	62
Distinguishes comparative sizes and quantities:			
(points to those objects that are identical in size within a group)	52	93	41
(points to the smallest and largest of six objects)	27	77	50
(points to which group has more and which has less of two groups of objects, e.g., 3 pencils and 6 pencils)	49	90	41
(places in order six objects of different size)	24	71	47
Associates numerals with the quantities 1-5:			
(states orally the appropriate number when shown from one to five objects)	37.	90	53
(associates the oral numerals [zero to five] with the appropriate numerical symbol [0 to 5])	18	73	55
Begins to understand the concept of sets:			
(points to a set of objects that are placed among non-set objects)	42	83	41
Understands the concept of one more and one less:			
(points to which group contains one more object and which contains one less object than a comparison group)	24	78	54
Understands the concept of zero:			
(states orally when zero objects of a given type are presented)	12	83	71

TABLE 7

Small Motor Skills

N = 78

SMALL MOTOR SKILL	Percent Mastering Skill		
	Pre-Test	Post-Test	% Gain
Pinches off bits, squeezes, pounds, pats and pushes clay or dough	72	100	28
String beads	77	100	23
Manipulates puzzles: stacks materials, pegs, parquetry blocks	67	99	32
Uses crayons, paint brushes and pencils	65	99	34
Uses scissors correctly	23	88	65
Uses opposing thumb	66	100	34
Pounds a nail with a hammer	07	99	92

TABLE 8

Social Skills

N = 78

SOCIAL SKILL	Percent Mastering Skill		
	Pre-Test	Post-Test	% Gain
Participates in a variety of activities during free play	50	93	43
Shares classroom toys with other children	44	84	40
Helps others when requested to do so	58	91	33
Uses classroom materials in the appropriate fashion	59	94	35
Able to play or work in small groups of peers (e.g., does not fight, dictate, or demand or submit to others)	31	76	45
Communicates with adults (e.g., does not demand excessive attention, ignore other children in favor of adults, reject adults and/or act in hostile fashion toward adults)	39	91	52
Able to encounter new situations in the classroom without fear (e.g., the student does not withdraw or lag back)	58	98	40
Demonstrates safety consciousness (e.g., awareness of dangerous objects, follows orders of teacher regarding safety issues)	51	94	43

TABLE 9

Percentages of Students Achieving 100, 75-99 and
Less than 75 Percent
of the Goals in Each Subject (1977 to 1983)

Year	Percentage	Reading/ Language	Numerical	Small Motor	Social Skills
1977	100%	16	19	33	55
	75-99%	79	58	64	38
	less than 75%	05	23	03	07
1978	100%	18	16	37	73
	75-99%	61	40	56	20
	less than 75%	21	44	06	07
1979	100%	15	15	45	Not Determined
	75-99%	39	27	20	
	less than 75%	46	58	35	
1980	100%	26	33	71	71
	75-99%	56	32	15	20
	less than 75%	18	35	14	09
1981	100%	30	18	30	67
	75-99%	53	50	68	22
	less than 75%	17	32	02	11
1982	100%	52	50	86	63
	75-99%	39	36	11	20
	less than 75%	10	14	03	17
1983	100%	68	64	87	76
	75-99%	27	32	12	17
	less than 75%	05	04	01	07
1984	100%	41	50	88	63
	75-99%	47	37	10	28
	less than 75%	12	13	01	09
1985	100%	42	43	65	68
	75-99%	45	32	32	18
	less than 75%	13	25	02	14

FOLLOW-UP STUDY OF FORMER PROGRAM STUDENTS IN KINDERGARTEN AND GRADE 3

Conclusions of earlier follow-up studies conducted in 1978-80 of former Title I preschool students were that their performances in kindergarten were quite consistently better than those of other students in the same grade. However, in these earlier studies, teachers were asked to rate the performances of the former preschool students as compared to others in his or her class without actually rating the peers, i.e., matched comparison students or other comparable students were not selected with students in both groups rated simultaneously.

To overcome the weakness of not having appropriate comparison data, studies of the last four years have used comparison students matched according to school, grade, sex, ethnic group and, to the extent possible, month of birth. Also, district enrollment records were obtained and used to avoid selecting comparison group members who had preschool experiences in other district preschool classes.

Like the last three studies, the follow-up study of preschool students of 1983-84 was conducted in Spring 1985. Seventy-eight former preschool students were found to be enrolled in kindergarten in 14 schools. Ratings were obtained for 68 matched pairs. For the remaining 10 students satisfactory matches could not be made for them or one of the pair left the school too early to permit an acceptable performance rating to be made. Again, a non-preschool comparison group of kindergarten students matched according to school, grade, sex, age and ethnic group was identified. Age matching was nearly always possible within a month or two, and only a few differences were greater than two months.

As in earlier studies kindergarten teachers of the former preschool and comparison students were asked to rate each student's achievements in six skill areas using six-point rating scales (see attachment). Students were to be rated below average (1-2), average (3-4), or above average (5-6), compared to other students in the class. Mean ratings were calculated for the preschool and comparison groups for the six skill areas. The results are shown in Table 10.

TABLE 10

Performance Ratings of Preschool and Comparison Groups (N = 68)

Skill Area	Preschool Mean	Preschool SD	Non-Preschool Mean	Non-Preschool SD	Mean Difference (P - NP)
Ability to Remain on Task	3.94	1.43	3.88	1.49	0.06
Language Skills	3.90	1.32	3.65	1.46	0.25
Numerical Concepts	4.10	1.30	3.62	1.48	0.54*
Small Motor Skills	4.15	1.34	3.81	1.36	0.34
Large Motor Skills	4.18	1.14	3.85	1.13	0.33
Social Skills	3.87	1.39	3.84	1.32	0.03

*(P less than .05)

The sign test was used to determine if the performances of one group were consistently better than those of the other across the six skill areas. The means of the preschool group were all higher, indicating the differences are consistent. Also, t-tests were used to determine if there were significant group differences on specific skills. One comparison (numerical concepts) on specific skills reached the accepted level of significance (p. less than .05). These results are interpreted to indicate the differences for specific skills are small, but consistently different in favor of the preschool group.

Results of follow-up studies which use matched groups of non-preschool students as comparisons have now been accumulated for four years. Last year it was noted that in the 1982 study, students with preschool experiences received higher ratings than the comparisons in all six skill areas. However, in the 1983 and 1984 studies, with two exceptions in 1983, the comparison students received higher ratings in all six skill areas. A possible explanation of the differences in performances based on the fact that the 1982 ratings were obtained slightly earlier in the school year was offered.

In the 1985 study just concluded, the results showed the ratings of former preschool students once again higher in all six skill areas. These findings are opposite to those of the last two years and tend to contradict the explanation offered for the differences observed last year. These mixed results are difficult to explain and they do not necessarily rule out effects of the preschool treatment. It is possible that it is the quality of the preschool treatment that makes the difference and not simply whether or not the students have preschool experiences.

Given the realities and practicalities of the preschool programs in Portland Public Schools, it is difficult to conceive a research design that in a few years time could satisfactorily demonstrate the effects, or lack of effects, of what may be considered a representative preschool program. Such a program does not exist. The lack of a common treatment probably accounts for many of the contradictory findings appearing in publications of research on preschool education. Perhaps a most unfortunate interpretation of the contradicotry findings is that there are "no significant differences" resulting in a hue and cry by some to abandon preschool education, rather than to call for

investigations of qualitative aspects which appear to result in lasting effects. Few educational programs, including our own, are theory based and implemented accordingly; thus, research on qualitative aspects is made increasingly more difficult. Researchers are left to sift through the evidence to identify critical treatment variables. Once located, opportunities to examine these variables in their purer form in laboratory settings, let alone in school settings, are rare and not frequent enough so conclusive results cannot be produced in a short time.

In the Portland Chapter I Early Childhood Education program an attempt is being made to have classroom teachers implement a more theory based instructional program. Such a program emphasizes student involvement in educationally worthwhile activities, e.g., being on task for as much time as possible. Observations the past few years have indicated that preschool students can be taught to be involved in educationally worthwhile activities nearly one hundred percent of the time. The question now is how can every teacher accomplish this.

Another follow-up study of former preschool students is one in which basic skills achievement test scores of students in grade three are examined. In the 1982 follow-up study of former preschool students of 1980-81 in kindergarten, a matched group of preschool students was identified for comparison purposes. In the 1984-85 school year just completed, these students were expected to be in grade three where objective test information is available from the district wide program.

The follow-up study of former students enrolled in preschool in 1980-81 used grade 3 basic skills achievement test scores from the districtwide testing program. In the kindergarten followup of these students in Spring 1982, a comparison group of non-preschool students who were matched on the basis of school, grade, sex, ethnicity, and age was identified. Of the 96 matched pairs of students who were included in the kindergarten follow-up study of 1982, 36 pairs were found to be enrolled during the 1984-85 school year. For the remaining 60 pairs, one or both members was not enrolled in Portland schools.

Achievement test scores for both Fall and Spring were available for 21 of these 36 matched pairs of students, except for one score for one student in reading. For the remaining 15 pairs, 8 members of the preschool group and 6 members of the comparison group were identified as being in grade 2. Students in grade 2 do not participate in districtwide testing; therefore, no scores were available for them. For the other pair, no scores were available for one of the students even though the student was identified as being enrolled in Grade 3. Scores for these 21 matched pairs of students are shown in Table 11.

TABLE 11

Fall 1984 and Spring 1985 Mean Achievement Test Scores of Former Preschool Students of 1980-81 and Comparison Students in Grade 3.

FALL 1984

	Former Preschool		Comparison Group		
	Mean	SD	Mean	SD	Mean Difference
Reading	193.90	9.16	189.25	20.43	4.65
Math	188.81	5.59	183.67	12.27	5.14
Language	195.52	7.18	192.81	13.05	2.71

SPRING 1985

	Former Preschool		Comparison Group		
	Mean	SD	Mean	SD	Mean Difference
Reading	197.19	11.35	193.60	15.19	3.59
Math	198.57	8.02	194.19	14.13	4.38
Language	199.10	7.95	194.95	14.99	4.15

In the 1984 follow-up study, matched groups were not used, so the combined scores of schools in which nearly all of the former preschool students were enrolled were used for comparison purposes. The results of this study, which also included a larger number of students due to the no match requirement, showed the mean scores of the former preschool students were higher than those of their peers for both Fall and Spring in all three subjects. However, none of the differences reached the accepted level of significance (p greater than .05). It was pointed out that these findings appeared to be contrary to those of the 1982 study in which scores of former preschool students were found to be consistently lower than those of their grade level peers in grade 3 and 4.

Results of the 1985 follow-up study show the Fall and Spring achievement scores of the 21 former preschool students were consistently higher than those of their matched group peers in all three subjects; however, none of the comparisons reached the accepted level of statistical significance (p greater than .05). In fact, the scores of the former preschool group were a little higher than district averages while those for the comparison group were a little lower.

The failure of the large mean differences to reach significance is probably due to the small number of cases along with the large variance (standard

deviaton), especially of the comparison group. It is interesting to note that the standard deviations of the former preschool group are generally about half those of the comparison group. This finding is difficult to interpret; it was not expected. More data are needed to substantiate these findings. Fortunately, matched groups of students have been used in kindergarten follow-up studies for the last four years, so results of all follow-up studies can be examined together.

OBSERVATIONS AND COMMENTS

Observations of classroom activities at intervals throughout the year have been continued. One purpose was to examine the curricular content and the appropriateness of the achievement record and how the content changes as the year progressed. The second purpose was to identify exemplary practices that might be shared among teachers, or to identify common problems and to determine ways of solving them. In this manner, both curriculum and instruction were examined.

The Early Childhood Education teaching guide was developed for the District in 1973. The Title I/Chapter I program curriculum follows this guide with some minor changes, mostly within content areas. Like any test, the Record of Goals Mastery includes only a sample of items within learning content areas in which mastery is to be expected. It is not the total content, but represents the curricular areas quite well. The scope of the curriculum seems satisfactory, so the next concern is the organization and sequence for learning.

Teachers select materials and arrange learning experiences to enable children not only to master the content areas being measured, but to achieve mastery in areas, perhaps, considered to be of equal or greater educational significance. Regardless of the content area, as the year progresses one should observe children being exposed to content that requires increasingly more ability to master and children performing previously learned skills with increasingly greater facility. In some content areas, increasing complexity and increasing skills are quite apparent, e.g., recognition of letters to recognition of words. In others, however, the complexity or skills dimensions are more difficult to discern, e.g., following directions, interacting with peers. Whatever the case, children at the preschool age mature rapidly, and if changes in curricular emphases are made to correspond with increasing maturity, such changes should be observable over time.

Observations these past few years tend to indicate that matching and arranging the curriculum and activities to correspond to the increasing skills and maturity of students as the year progresses is not practiced as consistently and frequently as it might be. For example, children begin using scissors in the first week of school. This is a difficult skill for children to master, yet there are not prerequisites or sequence of events to introduce the skills. Also, figures to be cut out are often determined by holidays and other significant occurances and not by the difficulty of the cutting task. Some children show considerable frustration when they are unable to do the task as they desire. While attention to speed and accuracy or quality of work is observed, it is not observed as frequently and as consistently as it might be. Children are often praised for a good job, but they are not told what made the job good, e.g., they persisted, cut on the line, were more skillful.

Scope and sequence may not be relevant considerations in all activities; however, some aspect of increasing quality, complexity, speed, etc., is worthwhile and can be emphasized. These are ways to maintain student interest and motivation and thereby increase the time students are engaged in educationally worthwhile activities.

Observations over the last few years have concentrated on instructional arrangements and teaching techniques for increasing the amount of time students behavior is educationally productive. Preschool children do not instinctively adjust their behavior to the classroom; they learn the behavior expected of them. Given a learning task, some children will immerse themselves in it until completion. Some will work sporadically, and unless they are taught to persist, their nonproductive behavior can be expected to continue. Others will ignore the task and pursue something more interesting, and again, unless they are taught otherwise their behavior will continue. Similar circumstances with productive behavior result from children completing tasks at different times. What should children at this age be permitted to do when they complete a task and are waiting for others, and what might be the future consequences of what they are permitted to do?

This past school year, observations were made to determine the extent to which student behavior, particularly in terms of on-task behavior and following directions, at the preschool level could be reasonably controlled. Teachers and aides differed considerably in the amount of control they exerted, and as an apparent consequence there were noticeable differences in the way students behaved in their classes. The point here is not how much control teacher and aides should exert, but to determine first, how much children might be

expected to control their own behavior in given situations to avoid too little or excessive control. For example, preschool children involved in individual seatwork would not be expected to be involved in productive behaviors 100 percent of the time, even by the end of the school year, but they might be expected to be involved 75 percent of the time. A workshop will be held in Fall, 1985 to discuss the issue of educationally productive behavior, or on-task behavior, and to determine if optimum levels to be achieved might be established.

SUMMARY AND CONCLUSIONS

The evaluation of the Chapter I Early Childhood Education Program includes information on students during and at the conclusion of their preschool experiences and follow-up information on students one year later and four years later. Most of the evaluation tends to focus on academic achievement, especially in the follow-up in later years, with some attention to social and physical skills in the earlier preschool and kindergarten years.

Preschool evaluation results over the last few years are quite similar despite some changes in instructional personnel each year. The results for later years are generally more favorable compared to earlier years with students making noticeable gains especially in academic areas. Perhaps the District's achievement focus is having an influence even at the preschool level.

Results of follow-up studies are difficult to interpret. First, the results for students in kindergarten were quite positive this year. However, over the last four years, the results have been mixed when compared with matched groups

of students without preschool experiences. A question, which for practical reasons cannot be answered at this time, is the general one of the apparent effect of preschool experience compared to no preschool experience regardless of the quality of that experience. Until results can be reproduced with some consistency, interpretations are made with caution.

Results using achievement test scores of students in grade three are encouraging, but again interpretations are made with caution due mainly to the small numbers of students on which the observations were based. More data using achievement test scores are needed to determine if the findings are reliable. Experiences in these studies of students in kindergarten and in grade three have helped to explain the mixed results of preschool evaluations reported around the country. Failure to consider qualitative aspects of the preschool treatment in relation to the measures of performances has been a weakness of nearly all studies including our own.

Currently in the Portland Chapter I Early Child Education program, efforts are being made to make the experiences of students in the program more alike, at least in terms of one particular, qualitative dimension. Unless such dimensions can be isolated and described at least conceptually, it seeems quite premature to suggest which kinds of experiences are appropriate for inclusion in the program.

Student's Name _____ Teacher's Name _____
Student's Birth Date _____

EARLY CHILDHOOD EDUCATION
Record of Goals Mastery

Working — skill has been introduced and instruction is still needed.
Mastery — skill has been mastered.

	Sept		May	
	Working	Mastery	Working	Mastery
Language Skills				
Describes objects according to their characteristics				
Colors: (red, yellow, blue)				
(green, orange, purple)				
(brown, black, white)				
Location: (stove, bed, toilet, refrigerator, sink, bathtub, sofa)				
Answers simple questions by giving answers in complete sentences				
Identifies common objects: (head, leg, arm)				
(eyes, nose, mouth, ears, foot, knee, hand, fingers)				
(rabbit, dog, cat, bird)				
(horse, chicken, cow, goat, sheep)				
(lion, tiger, monkey, elephant, seal, camel, bear, giraffe)				
Listens with increasing attention span: (longer or more complex stories can satisfactorily be presented by the teacher as the year progresses)				
Expresses self freely & clearly: (notifies teacher when it is appropriate — e.g., when s/he needs help or permission)				
Gives clearly spoken, spontaneous answers to questions about a story				
Orally identifies four simple rhyming combinations				
Understands and uses simple prepositional relationships: (places objects in front of, behind, beside, under, around, inside, outside, on)				
Numerical Concepts				
Recognizes & identifies simple shapes: (points to and names: circle, square, triangle)				
(points to and names: rectangle, diamond)				
Distinguishes comparative sizes and quantities:				
(points to those objects that are identical in size within a group)				
(points to the smallest & largest of six objects)				
(points to which group has more & which has less of two groups of objects — e.g., 3 pencils & 6 pencils).				
(places in order six objects of different size)				
Associates numerals with the quantities 1 to 5: (states orally the appropriate numeral when shown from one to five objects)				
(associates the oral numerals (zero to five) with the appropriate numerical symbol (0 to 5)				
Begins to understand the concept of sets: (points to a set of objects that are placed among non-set objects).				
Understands the concept of one more and one less: (points to which group contains one more object & which contains one less object than a comparison group)				
Understands the concept of zero: (states orally when zero objects of a given type are presented)				
Small Motor Skills				
Pinches off bits, squeezes, pounds, pats and pushes clay or dough				
Strings beads				
Manipulates puzzles; stacks materials, pegs, parquetry blocks				
Uses crayons, paint brushes, and pencils				
Uses scissors correctly				
Uses opposing thumb				
Pounds a nail with a hammer				

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	Sept		May	
	Working	Mastery	Working	Mastery
Social Development				
Participates in a variety of activities during free play				
Shares classroom toys with other children				
Helps others when requested to do so				
Uses classroom materials in the appropriate fashion				
Able to play or work in small groups of peers (e.g., does not fight, dictate, demand or submit to others)				
Communicates with adults (e.g., does not demand excessive attention, ignore other children in favor of adults, reject adults and/or act in a hostile fashion toward adults)				
Able to encounter new situations in the classroom without fear (e.g., the student does not withdraw or lag back)				
Demonstrates safety consciousness (e.g., awareness of dangerous objects, follows orders of teacher regarding safety issues)				
Additional Skills				
Teachers may find the remainder of this form useful in assessing the following skills.				
Art and Music				
Willingness to participate in art activities				
Handles art media and tools appropriately				
Participates in dance and circle games				
Detects differences between fast and slow music				
Sings words and follows along in time to songs frequently sung in class				
Distinguishes between loud and soft sounds				
Large Motor Skills				
Walk backwards				
Stand and run on tiptoes				
Roll a ball to another person and catch it from a sitting position				
Hop in place on each foot				
Go up and down stairs using alternate feet				
Do a standing broad jump				
Stand on each foot for eight seconds				
Gallop				
Skip on one foot with alternate foot stepping				

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Student's Name_____ School No._____

Student Rating Form

Please rate this child's general achievement by circling the appropriate number for each item.

In using the scale, rate the child's achievements by comparing them with other students in the class.

Level of Achievement in:	Achievements as compared to other students in the class		
	Below Average	Average	Above Average
A. Ability to remain on task	1 2	3 4	5 6
B. Language skills	1 2	3 4	5 6
C. Numerical concepts	1 2	3 4	5 6
D. Small motor skills	1 2	3 4	5 6
E. Large motor skills	1 2	3 4	5 6
F. Social skills	1 2	3 4	5 6

Please make any comments you may wish:_____

_____

_____

_____

KY/ams
3/1/82